TEXTRON Systems



Public Safety Broadband Network War Game #1 Results



Textron Washington, D.C. Office May 23-24, 2012

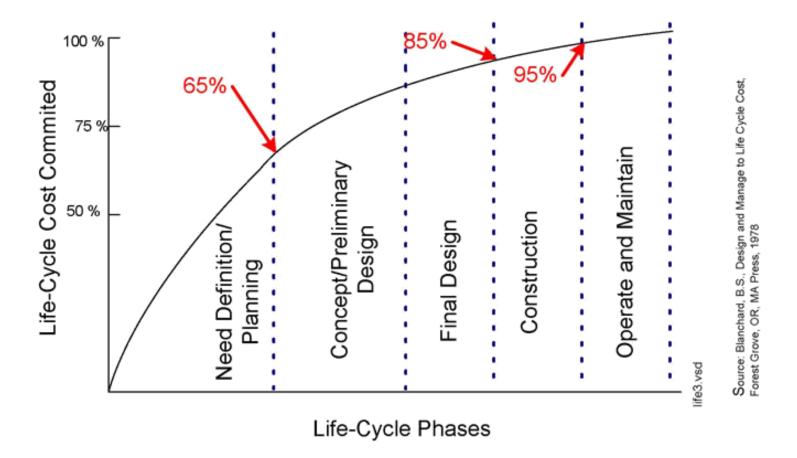
Overview

The last remaining recommendation of the 9-11 Commission is the creation of a nationwide, interoperable public safety network. Recent legislation charges the National Telecommunications Information Administration (NTIA) with a lead role in its creation. NTIA must create a public-private corporate board, the First Responder Network Authority (FirstNet), that will ultimately establish the public safety broadband network (PSBN).

In an effort to contribute to the development of the PSBN, Textron Systems held a War Game to explore the challenges and opportunities inherent in setting up the FirstNet board, and ultimately deploying PSBN nationwide.

Textron conducted the first installation of the War Game on May 23-24 in Washington, D.C. with representatives from government, industry and the user community. The results of that initial War Game is what follows in this presentation.

Getting it Right Up Front



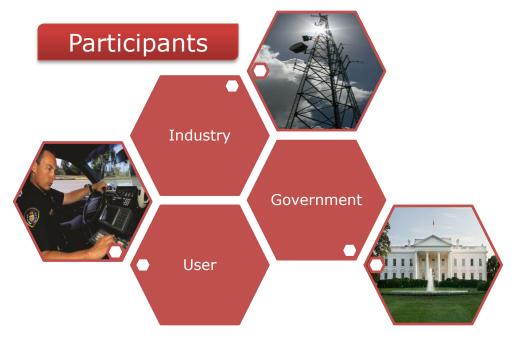
History shows that the effort to get it right up front is worth it.

Objectives

- 1. Ensure the First Responder community gets the network they need to help save more lives and use resources more effectively.
- 2. Characterize the unique challenge in building the FirstNet board.
- 3. Highlight challenges inherent in designing a plan to deploy a national public safety network.
- 4. Seek 360 degree perspective of the situation by including representatives from government, industry, and the user community.
- 5. Create and publish results of War Game exercise to improve the likelihood of success of PSBN.

War Game Process

- Best approach to understand environment given complex or undefined variables
- Role-play to understand landscape
- Predict actions and re-actions without direct knowledge



War Game Participants

- 24 total attendees
- Former Homeland Security, National Security Counsel Staff
- Former Commerce Department Staff
- Former Senate and House Committee Staff
- Former Defense Department Staff
- Former Intelligence Industry (CIA, FBI) Staff
- Current Telecommunications Industry Representatives, Consultants
- Intelligence Industry Consultants
- Strategic Communication and Public Education Consultants
- Telecommunications Analyst

War Game Process

- Three teams role-played to evaluate three hypothetical FirstNet board compositions
- 3 Teams
 - Government Community (GC)
 - User Community (UC)
 - Industry Community (IC)
- 3 Board Compositions
 - User-Focused Scenario
 - Telecom-Focused Scenario
 - Blended Scenario



Teams / Communities Represented

User

- Police, Fire
- National Guard
- FEMA
- Health Services
- Utilities
- Homeland Security
- Transportation
- FBI
- Coast Guard
- Red Cross



Government

- Congress
- States
- Committees
- DoC
- NIST
- NTIA
- FirstNet
- FCC
- Contract Officers
- Inspectors General



Industry

- Carriers
- OEMs
- System Integrators
- Application Developers
- Security Professionals
- Network Technology providers



FirstNet Board Composition Scenarios

MOVE 1:

User

Focused

- 10 Public Safety
- 1 Network Operator / Finance
- 1 Critical Infrastructure / Utilities

MOVE 2:

Telecom Focused

- 8 Telecom
- 3 Public Safety
- 1 Undefined

MOVE 3: Blended

- 5 Public Safety
- 3 Telecom (1 Rural, 2 Urban)
- 2 Equipment manufacturer
- 1 Finance
- 1 Federal Acquisition Specialist

Move 1: User Scenario Results

Benefits

- Emphasis on end-user needs increases
- Improves understanding of user adoption challenges

Composition:

10 Public Safety

1 Network Operator/Finance

1 Critical Infrastructure/ Utilities

Risks

- User perspective downplays technical, logistical, procurement issues at FirstNet level
- May lead to unrealistic balance of schedule and cost vs. capabilities
- Potential requirements volatility from increased user representation
- Political infighting between law enforcement jurisdiction diverts attention from PSBN objectives
- User lack of sensitivity to required bureaucracy for large programs

Move 2: Telecom Scenario Results

Benefits

- More realistic expectations from network deployment experience and with less user bias
- Decreased learning curve for network deployment and spectrum management
- Telecom political ties will drive support for PSBN
- Easier to leverage current infrastructure

Composition:

- 8 Telecom
- 3 Public Safety
- 1 Undefined

Risks

- Industry focus on technical & revenue vs public safety may lead to not satisfying user needs
- Limited user membership cannot represent diverse community
- Difficulty filling board without conflict of interest while including contemporary 4G LTE experience
- Less appreciation for cost to users of PSBN adoption
- Possible inefficiency of board from telecom infighting diversions
- Rural constituencies may not trust board based on telecom history

Move 3: Blend Scenario Results

Benefits

- Most diverse representation is attractive to a larger constituency
- Improved competition from federal acquisition membership
- Sufficient public safety representation makes this scenario politically viable
- Most likely to create optimal balance of cost, scope, and schedule

Risks

- Difficulty filling board without conflict of interest while including contemporary 4G LTE experience
- States interests not specifically represented
- Possible inefficiency of board/gridlock caused by disagreement and conflicting perspectives amongst diverse membership

Composition:

- **5 Public Safety**
- 3 Telecom (1 Rural, 2 Urban)
- 2 Equipment manufacturer
- 1 Finance
- **1 Federal Acquisition Specialist**

Result Matrix

	Users	Government	Industry
User Focused Scenario	User needs will drive PSBN activities	Lack of technical expertise, Scope creep PM can mitigate	Unreasonable tech expectations PM can mitigate
Telecom Focused Scenario	Insufficient user representation	Insufficient user representation	Difficult to staff & provide 4G LTE Expertise PM can mitigate
Blended Scenario	Challenge covering diverse user constituency	Covers large constituency, Minimizes risk	Difficult to staff & provide 4G LTE Expertise PM can mitigate

Summary Results

- Must maintain focus on delivering usable information to the end user
 - Primary measure of project/system success
- FirstNet board composition critical
 - Urban/rural political challenges looming
 - FirstNet needs a staff to manage project
 - Conflicts of interest must be carefully managed
- Strong, open and unbiased/neutral Program Manager needed for successful execution
 - Deployment strategy must drive open competition
- Revenue/business knowledge of government and industry must have equal importance with technical features to successful governance
 - Must develop a sustainable revenue model
 - Deployment must be phased with funding